

6LC8

High-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

For Sync-Separator and Noise-Immune
Gated-AGC-Amplifier Applications in
Color and Black-and White TV Receivers

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC) . . .	6.3 ^a	6.3 ± 0.6	volts
Current	0.600 ± 0.040	0.600 ^b	amp
Warm-up time (Average) . .	11	—	sec

Peak heater-cathode voltage

(Each unit):

Heater negative with respect to cathode	200 max.	volts
--	----------	-------

Heater positive with respect to cathode	200 ^c max.	volts
--	-----------------------	-------

Direct Interelectrode

Capacitances:^d

Triode Unit:

Grid to plate	2.2	pf
Grid to cathode & pentode grid No.3 & internal shield, and heater	2.8	pf
Plate to cathode & pentode grid No.3 & internal shield, and heater	2.2	pf

Pentode Unit:

Grid No.1 to plate	0.1 max.	pf
Grid No.1 to cathode, triode cathode & grid No.3 & internal shield, grid No.2, and heater	10.0	pf
Grid No.3 & triode cathode & internal shield to plate . .	3.4	pf
Grid No.1 to grid No.3 & triode cathode & internal shield	0.36	pf
Grid No.3 & triode cathode & internal shield to plate, cathode, grid No.2, grid No.1, and heater	12.5	pf

Characteristics, Class A₁ Amplifier:

	Triode Unit	Pentode Unit	
Plate Supply Voltage	200	150	volts
Grid No.3	—	e	



RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.

DATA 1
9-63

6LC8

	Triode Unit	Pentode Unit	
Grid-No.2 Supply Voltage	-	100	volts
Grid-No.1 Voltage.	-2	-	volts
Grid No.1.	-	e	
Cathode Resistor	-	180	ohms
Amplification Factor	70	-	
Plate Resistance (Approx.)	17500	100000	ohms
Transconductance, Grid No.1 to Plate	4000	4400	μ hos
Transconductance, Grid No.3 to Plate ^f	-	600	μ hos
Plate Current.	4	4	ma
Grid-No.2 Current.	-	2.8	ma
Grid-No.1 Supply Voltage (Approx.) for plate μ a =			
10	-5	-	volts
20	-	-4	volts
Grid-No.3 Supply Voltage (Approx.) for plate μ a = 20 ^f	-	-7	volts

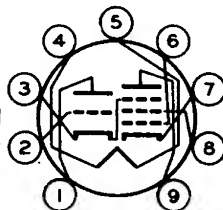
Mechanical:

Operating Position	Any
Type of Cathodes	Coated Unipotential
Maximum Overall Length	2-5/8"
Maximum Seated Length.	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip).	2" $\pm$ 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline.	See General Section
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW	9QY

Pin 1-Triode Plate
Pin 2-Triode Grid
Pin 3-Triode

Cathode,
Pentode Grid
No.3, Inter-
nal Shield

Pin 4-Heater
Pin 5-Heater



Pin 6-Pentode
Grid No.1
Pin 7-Pentode
Cathode
Pin 8-Pentode
Grid No.2
Pin 9-Pentode
Plate

GATED AGC AMPLIFIER & NOISE INVERTER

Pentode Unit

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system^g

DC PLATE VOLTAGE	300 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE ^h	600 max.	volts

RADIO CORPORATION OF AMERICA
Electronic Components and Devices

Harrison, N. J.



© 2006 The Authors
Journal compilation © 2006 Blackwell Publishing Ltd

Positive-bias value. 0 max. volts

GRID-No.2 VOLTAGE. See *Grid-No.2-Input Rating Chart*
at front of Receiving Tube Section

—

Positive-bias value. 0 max. volts

For grid-No.2 voltages

For grid-No.2 voltages

volts. See *Grid-No.2-Input Rating Chart*
at front of Receiving Tube Section

For fixed-bias operation 0.5 max. megohm

© 2004 Blackwell Publishing Ltd *Journal of Internal Medicine* 255: 105–112

Triode Unit

PLATE VOLTAGE. 300 max. volts

Negative-bias value. 50 max. volts

LATE DISSIPATION. 1.1 max. watts

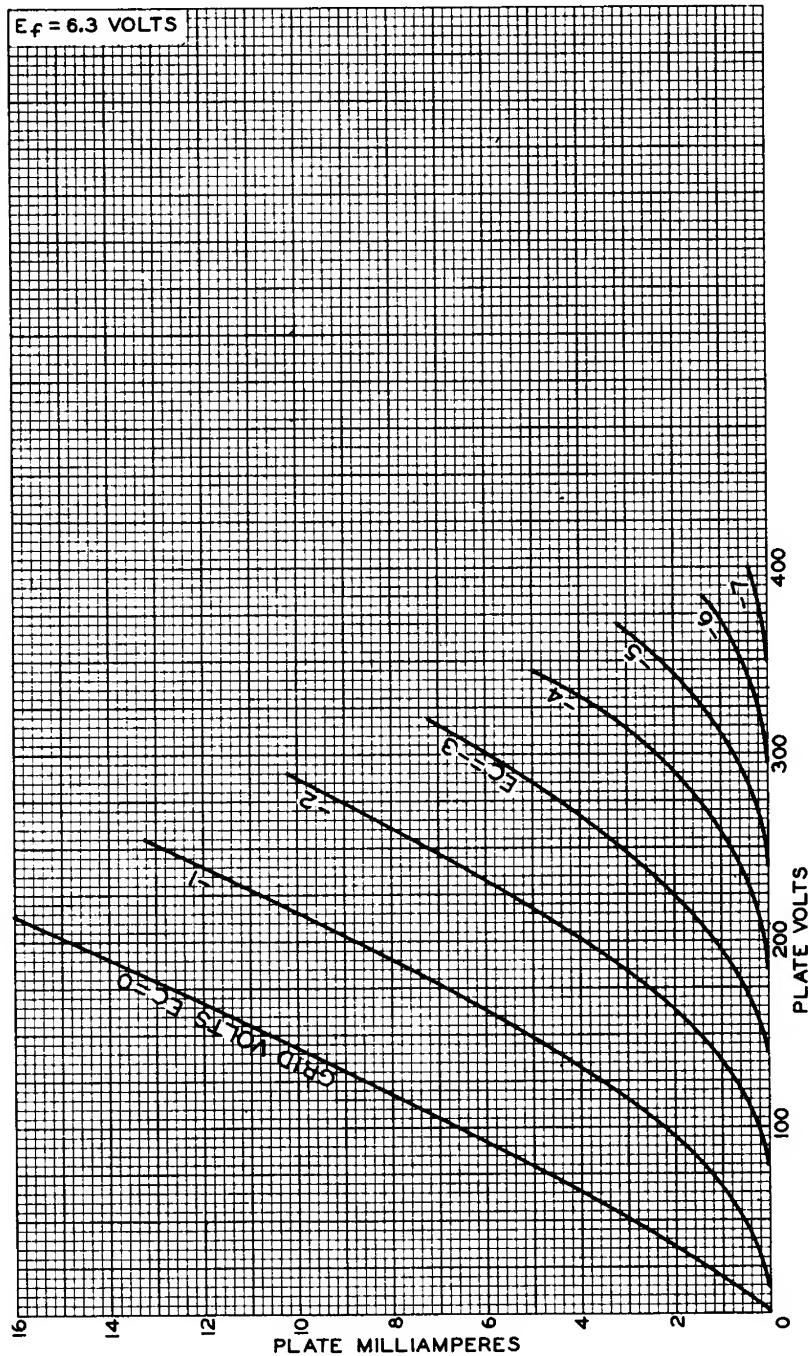
For fixed-bias operation 0.25 max. megohm

[illegible]

- h This rating is applicable when the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

6LC8

AVERAGE PLATE CHARACTERISTICS Triode Unit



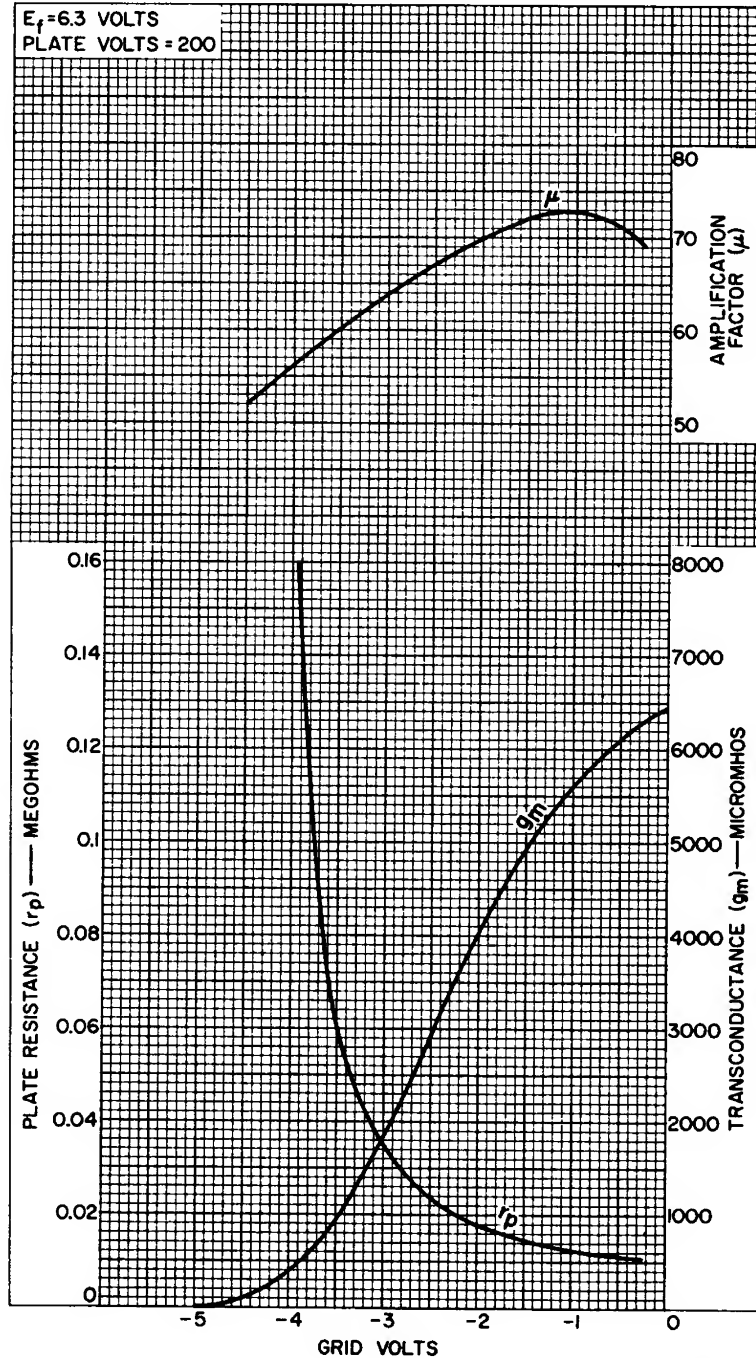
92CM-8644

RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.



6LC8

AVERAGE CHARACTERISTICS Triode Unit



92CM-8647

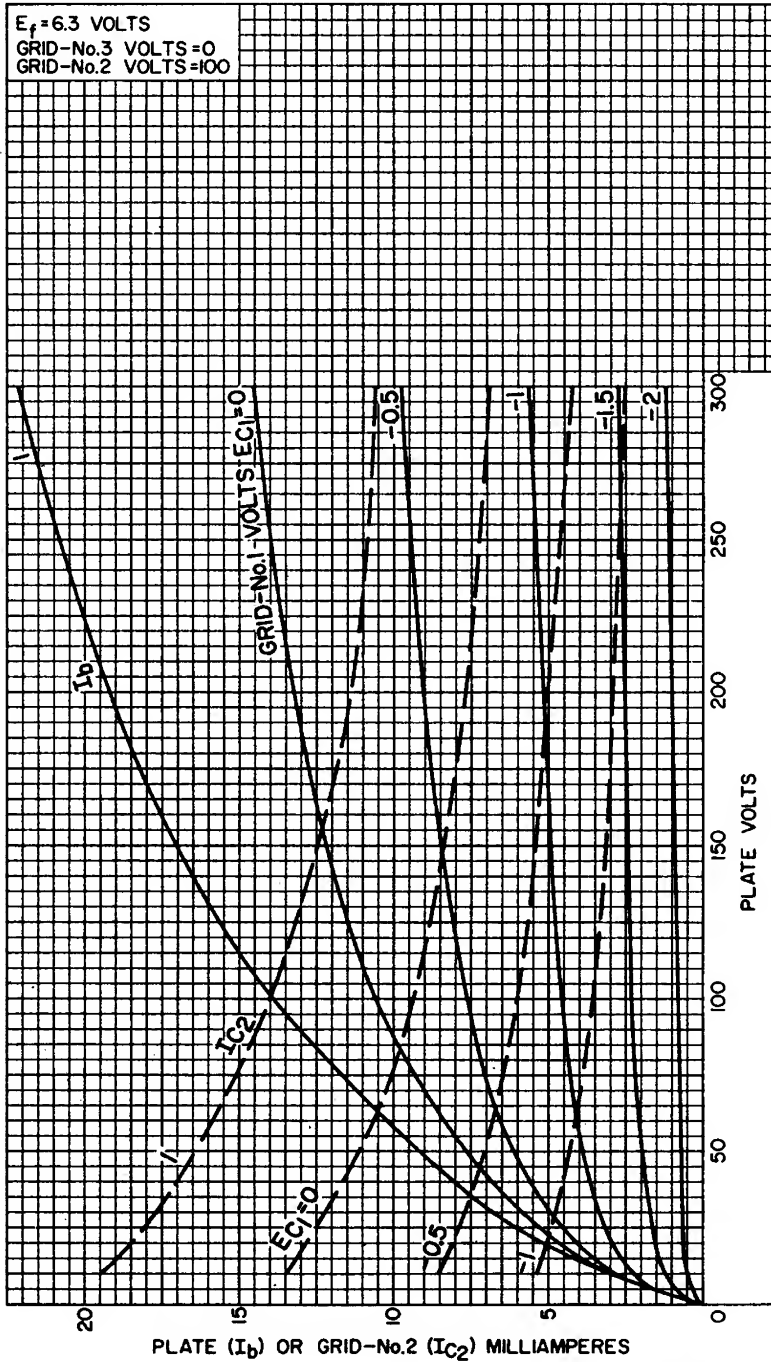


RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.

DATA 3
9-63

6LC8

AVERAGE CHARACTERISTICS Pentode Unit



92CM-11594

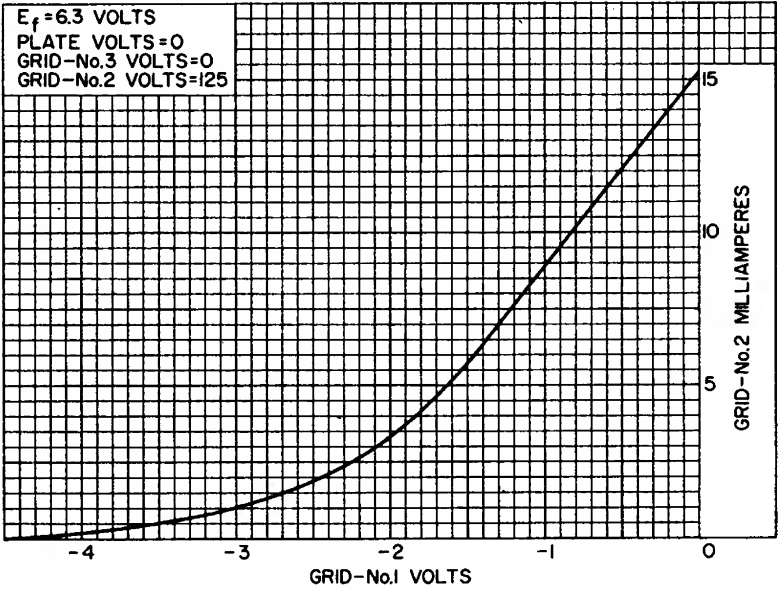
RADIO CORPORATION OF AMERICA
 Electronic Components and Devices



Harrison, N. J.

6LC8

AVERAGE CHARACTERISTICS Pentode Unit



92CS-11603



RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.

DATA 4
9-63